INACTIVATION OF PRION

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Abstract of JP11049611

PROBLEM TO BE SOLVED: To inactivate a prion or attenuate the infectivity thereof by treating, e.g. a protein having physiological activities, characteristics, etc., or a substance containing the protein or the prion contained in, e.g. a protein for a food material with a liquid specific alkenyl oxide.

SOLUTION: A protein, containing a prion as a substance which is an object of treatment mixed therein or having the possibility thereof or a substance containing the protein (e.g. a hormone) is used and treated with a solutionlike 2-4C alkenyl oxide (preferably ethylene oxide) dissolved in a solvent (e.g. water or solvent containing a lower alcohol or another hydrophilic organic solvent in an amount of <=10 wt.% in water) at -10 to +60 deg.C for 0.5-168 hr, preferably at 15-30 deg.C for 24-96 hr to inactivate the prion or attenuate the infectivity thereof. Furthermore, the physiolotical activities, characteristics, physical properties, etc., of the protein are retained. The concentration of the alkenyl oxide in the substance which is the object of treatment is preferably >=0.05 vol./vol.%, preferably 0.7-1.5 vol./vol.%.